SARS-COV-2 POINT OF CARE TESTING IN HIGH-RISK POPULATION TO IMPROVE PUBLIC HEALTH RESPONSE

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INTRODUCTION

- Point-of-care (POC) rapid diagnostic tests (RDTs) for SARS-CoV-2 are vital to mitigate disease spread
- RDTs have been placed in universities, and congregate settings to expand testing capacity and shorten turnaround times
- By access to RDTs communities are able to slow disease spread, especially within high-risk and vulnerable populations
- ID NOW (Abbott Diagnostic) utilizes isothermal nucleic acid amplification technology (NAAT) for qualitative detection of infectious diseases



OBJECTIVES

- MHDL's goal was to support and expand community testing capacity for quick, and easy access to COVID-19 testing for vulnerable and high-risk populations
- Quick reliable results, and system to confirm, presented a unique opportunity to help mitigate the spread of COVID-19 in non-traditional settings



MATERIALS & METHODS

- MHDL contacted community partners serving high-risk populations including Federally Qualified Health Centers (FQHC), universities, homeless shelters, and jails/correctional facilities, to gauge interest in ID NOW instrument for on-site COVID-19 testing
- MHDL personnel received virtual training from Abbott prior to deploying the Abbott ID NOW instruments
- Ensured community partners sites were provided training to meet all testing requirements including reporting to
 public health, as well as be CLIA compliant
- Per FDA "Negative results should be treated as presumptive, do not preclude SARS-CoV-2 infection, and should not be used as the sole basis for patient management decisions"
- MHDL offered confirmatory PCR testing to assess false negative result frequency, and ensure that truly positive
 patients were not missed at a high rate

Location Type	# of locations	Population Served	Benefits
Homeless Shelter/ Isolation Facility	2	Residents and staff at shelters	Allow for housing placement
Student Health Center	2	College students including those in dorm settings	Mitigate spread in dormitory and non-compliant population
Correctional Facility	2	Inmates and staff	Effectively house inmates in congregate setting
Fire Department/ EMS	1	Emergency personal	Mitigate spread and determine quarantine needs rapidly to prevent spread to other EMS personnel
Clinical Service Provider	4	Un/Underinsured, employees caring for vulnerable populations	Provide access to underserved populations

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RESULTS

- More than 17,000 ID NOW COVID-19 tests performed in first 12 months of pandemic at partner locations
- Approximately 2,100 tests had a positive result at point-of-care

TESTIMONIALS

- "If we did not have [the ID NOW] here at the shelter, tracking
 the virus would have been impossible and we would not have
 been able to keep the shelter as COVID free as possible
 throughout this past year.....allowed us to continue to keep
 current shelter residents safe and take in more individuals that
 are homeless.....given homeless residents and staff more
 peace of mind in knowing that we can test quickly and then act
 from there."-The Salvation Army
- "...the MFD would not have had the two approved testing sites that we utilized this past year to test thousands of people."
- "...kept front line fire and police personnel on the streets, where they were needed most, especially with COVID illnesses, DNC. and civil unrest." - Milwaukee Fire Department

CONCLUSIONS

- Use of ID NOW in high-risk and/or underserved populations had a positive impact in controlling the spread of COVID-19
- Collaborating with community sites allowed COVID-19 positive patients to be identified in real-time, aided rapid isolation, and contact tracing to reduce community spread
- Turn-around time of <1 hour as compared to 24-48 hrs. with SARS CoV-2 PCR confirmation to expedite mitigation strategies
- Use of the 15 ID NOW instruments dramatically increased testing capacity in Milwaukee county

ACKNOWLEDGEMENTS

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REFERENCES

 ID NOW Abbott Point of Care Testing, Abbott, 2021, www.qlobalpointofcare.abbott/en/product-details/id-now.html.

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